

STATEMENT OF WORK
FOR THE REPAIR/OVERHAUL/MODIFICATION
OF
T53-L-703 ENGINES

1. BACKGROUND

- 1.1. The United States Department of State (DoS), Bureau for International Narcotics and Law Enforcement Affairs, Office of Aviation (INL/A) provides aviation support for the eradication and interdiction of illicit drugs, training of contractor and host nation personnel, embassy support, movement of personnel and equipment, reconnaissance, personnel recovery (PR), medical evacuation, security of personnel and equipment, and ferrying of aircraft. To support the aforementioned missions, INL/A maintains a fleet of 85 UH-1H II Honeywell T53-L-703 powered aircraft and approximately 25 spare T53-L-703 engines.

2. SCOPE

- 2.1. INL/A requires overhaul, repair, and/or modification of DoS provided Honeywell T53 series engines to the most current Original Equipment Manufacturer (OEM) specifications to include but not limited to the following:
- all applicable OEM repair and overhaul specifications
 - all OEM Service Bulletins (SBs), Service Letters (SLs), and Service Instructions (SIs)
 - all Federal Aviation Administration (FAA) Airworthiness Directives (ADs)
- 2.2. INL/A also requires a source to recondition aging and damaged T53-L-703 shipping and storage containers to serviceable condition. Engine shipping and storage containers protect repaired, overhauled, or modified engine power units, modules, and components while in storage or in-transit. INL/A requires inspection, repair, and reconditioning for its T53-L-703 shipping and storage container inventory.

3. TASKS/REQUIREMENTS

3.1. Repair Station Certifications (T53 engine only)

- 3.1.1. The Contractor facility shall be a FAA Part 145 authorized repair station as well as a Honeywell certified engine overhaul/repair facility to effectively inspect, test, troubleshoot, clean, overhaul, repair, and preserve Honeywell T53-L-703 engine power units, modules, and components to current OEM configurations while maintaining any INL/A identified specific requirements for return to service in a Ready For Issue (RFI) condition for operational use. Additionally, since Honeywell no longer manufactures new T53-L-703 engines, the Contractor shall have the capability to convert United States Government (USG) furnished T53-L-13B and military T53-L-703 engines to the most current T53-L-703 5000 hour Time Before Overhaul (TBO) OEM specifications.

3.2. Loss of Certification (T53 engine only)

- 3.2.1. If the Contractor facility, for any reason, loses its Federal Aviation Administration (FAA) and/or Honeywell certification during the period of performance, this constitutes a material breach of contract which may, at the discretion of the Contracting Officer (CO), result in contract termination. The Contractor shall notify the Contracting Officer verbally and in writing, not later than five (5) calendar days after certification forfeiture, and disclose all facts relevant to the forfeiture. (CDRL A001)

3.3. Repair Station Capabilities (T53 engine only)

- 3.3.1. The Contractor shall be responsible for all necessary actions required to perform the services requested and comply with Honeywell and FAA Part 145 repair station certification. This includes, but is not limited to, quality systems, required tooling, manuals, test equipment, parts, material, engineering services, management, maintenance, documentation, preservation, shipping container serviceability, and shipping of the T53-L-703 engine power units, modules, and components.
- 3.3.2. Utilizing the support items from the previous section (3.3.1 of this Statement of Work (SOW)), the Contractor shall maintain the expertise necessary to satisfactorily inspect, test, troubleshoot, clean, overhaul, repair, modify, and preserve T53-L-703 engine power units, modules, and components IAW OEM and FAA specifications, to include the most current revisions, modifications, and amendments to OEM repair/overhaul/SB instructions as well as all FAA directives.
- 3.3.3. When modifying military T53-L-703 and T53-L-13B to OEM T53-L-703 specifications, the Contractor shall be familiar with and comply with the General Services Administration (GSA), Federal Management Regulation (FMR), Subchapter B, Part 102-33.115, Acquiring Government Aircraft and Aircraft Parts, rules pertaining to Flight Safety Critical Aircraft Parts (FSCAP) and FAA Advisory Circular 20-142.

3.4. Warranty (T53 engine only)

- 3.4.1. The Contractor shall establish and provide a warranty plan (CDRL A002) to ensure that all replacement parts and services are covered by warranty. The warranty plan shall provide a warranty repair process to include, but not limited to, procedures for notification, processing, validation, length of warranty from time of service, shipping instructions and a point of contact (POC) between the Contractor and INL/A.
- 3.4.2. All overhauled engines shall carry a minimum of 2 year/1000 hour, whichever comes first, standard commercial based warranty on workmanship, parts and labor from the Contractor's repair facility.
- 3.4.3. Warranty on Honeywell new parts installed at overhaul will be valid for a total of four (4) years. The Contractor shall act on behalf of the USG in the processing of claims or adjustments arising out of, and because of, defective parts, materials, and workmanship for Honeywell warranties.
- 3.4.4. All warranty discrepancies shall be validated, corrected, return shipped and accepted by INL/A in a time frame not to exceed 180 calendar days from initial notification.

- 3.4.4.1. The Contractor shall expedite the repair or replacement of validated and warranted defective components at the Contractor's expense.
- 3.4.4.2. Non-validated warranty repairs shall be quoted and expensed to INL/A utilizing the procedures established in section 3.9 of this SOW.

3.5. Documentation

3.5.1. The Contractor shall document and provide the following documentation for each T53 contracted repair/overhaul event:

- 3.5.1.1. Vendor repair station specific repair/overhaul documentation to include but not limited to Teardown Inspection Report (TIR), photos, engine log, engine history record, engine operating record, engine maintenance record, maintenance release record, and engine test cell run data and findings record. (CDRL A003)
- 3.5.1.2. Department of the Army (DA) specific forms In Accordance With (IAW) Department of the Army Pamphlet (PAM) 738-751. Specific forms include but are not limited to DA Form 2408-5-1 (Equipment Modification Record (Component)), Form 2408-16 (Aircraft Component Historical Record), DA Form 2419 (Aircraft Engine Turbine Wheel Historical Record) DA Form 2408-20 (Oil Analysis Log)
- 3.5.1.3. FAA airworthiness Form 8130-3 or other FAA compliant forms.

3.6. Test Cell Certification

3.6.1. The Contractor shall only utilize an OEM correlated and certified engine run and test cell for DoS engines to determine acceptable engine performance.

3.7. Shipping

- 3.7.1. All T53 engines requiring repair, overhaul, or conversion will be shipped from/to the INL Logistics Center in Melbourne, Florida. Upon notification that T53 engine assets require repair, overhaul, or conversion from the CO, or delegated representative, the Contractor shall coordinate shipping schedules and verify assets are ready for shipment with the CO, or delegated representative. Within 7 days after consensus between the two organizations has been reached, the Contractor shall take all the necessary actions required to ship the T53 engines from/to the INL Logistics Center at Melbourne, Florida to/from the Contractor's repair facility. The Contractor shall utilize only transportation carriers that are certified, both drivers and equipment, to transport aviation jet engines.
- 3.7.2. The Contractor shall notify the CO in writing, confirming receipt of all assemblies and components. Notification of item receipts shall include, but are not limited to, the following information: Nomenclature, National Stock Numbers (NSN), Part Numbers (P/N), Serial Numbers (S/N), Contract Number or Task Order Number, Contract Line Item Numbers (CLIN), and dates of receipt. Notifications of item receipts via facsimile/email are acceptable and may contain single or multiple notification entries. (CDRL A004)

3.8. Inventory Upon Arrival

3.8.1. Incoming inventories shall be performed on all T53 engine power units, modules, components and shipping containers. If inventory irregularities are identified upon receipt of T53 assets and/or shipping containers, the Contractor shall notify the CO, or authorized point of contact, within 7 calendar days of receipt of shipment. The CO will provide guidance for inventory shortages within 7 calendar days of receipt of notification by the Contractor. If no guidance is received from the CO after 7 calendar days, the Contractor shall quote the costs associated for replacement and/or repair of missing inventory within the quote for repair/overhaul/conversion of the T53 engine assembly (section 3.9 of this SOW) under a sub-heading labeled "Shortage upon Arrival". Notifications of missing inventory discrepancies via facsimile/email are acceptable and may contain single or multiple notification entries. (CDRL A005).

3.8.1.1. Missing Components: Within 7 calendar days after the receipt and inspection of the components, the Contractor shall notify the CO in writing of any missing parts or sub-assemblies required for final inspection and acceptance. (CDRL A005)

3.8.1.2. Counterfeit or Suspect Components: Upon receiving and identifying components exhibiting evidence of being counterfeit, the Contractor shall notify the CO, in writing (CDRL A005) and in detail, within 7 calendar days and discontinue all actions until receipt of written authorization to proceed from the CO. The CO reserves the right to appoint a technical representative who shall witness the remaining teardown and inspection of the component.

3.8.1.3. INL/A reserves the right to provide Government Furnished Property (GFP) to replace parts or hardware identified as missing or determined to be unserviceable.

3.9. Incoming Inspections

3.9.1. Incoming inspections shall be performed on all T53 engine power units, modules, components and shipping containers. Once assets are received at the Contractor's facility, the Contractor has 30 calendar days to inspect and evaluate the T53 engine and shipping container for all necessary repairs. Shipping container quotes shall include all costs associated to repair, recondition and paint Government Furnished Equipment (GFE). The T53 inspection and evaluation shall reflect all costs associated to repair, overhaul, or convert engine power units, modules, and components to current OEM and FAA specification standards. Once the inspection has been accomplished, the Contractor shall submit to the CO a teardown, inspection and analysis report (CDRL A003) for the affected engine along with a written quotation (CDRL A006) for all actions necessary (repair, overhaul, or modification) and projected time to bring the affected T53 engine up to current OEM/FAA standards. Notifications via email are acceptable and may contain single or multiple notification entries. No further expenses shall be incurred against the affected engines/shipping containers without direction from the CO. The CO will review the quotation for repairs and will direct the Contractor to execute one of the following actions:

3.9.1.1. Quotation is acceptable: Contractor shall execute all actions as stated in the quotation.

3.9.1.2. Partial Approval: Contractor shall execute only quoted items specified by the CO.

- 3.9.1.3. Beyond Economical Repair (BER): When the cost of returning the component to serviceable condition exceeds the current replacement cost of that component or when the component cannot be worked due to damage or wear beyond the material properties, characteristic, or specifications of the item being repaired, the Contractor shall take the necessary actions to demilitarize and dispose of the equipment per the approved INL/A property disposal plan addressed in section 3.10 of this SOW.

3.10. Property Disposal Plan

- 3.10.1. The Contractor shall develop a USG property disposal plan based on Federal Acquisition Regulations (FAR) Part 45 and approved by the DoS Government Property Administrator. (CDRL A007)

3.11. Turn-around Time

- 3.11.1. Once authorization to proceed has been given to execute the actions specified by the CO in section 3.9 (item #3.9.1.1 and item #3.9.1.2 only) of this SOW, the Contractor shall have a maximum of 180 calendar days from the time of notification to accomplish the tasks necessary to pick-up, repair, overhaul, modify, and ship the affected equipment back to the INL Logistics Center in Melbourne, Florida. Unless otherwise specified by the CO, early completion of repair/overhaul/modification of USG assets is authorized and encouraged. The time to accomplish item #3.9.1.3 of section 3.9 of this SOW shall be IAW the approved Contractor developed USG property disposal plan from section 3.10 of this SOW.

3.12. T53 Shipping/Storage Container Reconditioning

- 3.12.1. The Contractor may recondition shipping storage containers both on and/or off site from the Contractor's engine repair facility as required. The use of a certified facility to recondition T53 engine shipping/storage containers is not required. However, the reconditioning facility shall be adequately qualified in welding, spray painting, and metal work to perform the necessary reconditioning and overhaul tasks on the containers.
- 3.12.2. Individual containers shall initially receive a full strip and repaint as part of the reconditioning process and thereafter touched up or repainted as necessary to maintain perpetual continuity with the INL/A paint scheme as described in the following section.
- 3.12.3. Shipping/Storage containers shall be painted with a purple overall base or background color. (FED STD 595B Description Color #37100 for reference only) Container labeling/stenciling shall then be applied over the purple base coat IAW overhaul stenciling requirements contained in Department of the Army (DA) Technical Bulletin (TB) 55-8100-200-24 (latest revision), chapter 3, section 3.4n. Lastly, stenciling requirements contained in section 9.2 (color and content) of this SOW shall be applied.
- 3.12.4. T53 shipping storage containers shall be inspected utilizing chapter 2 "Classification and Use" procedures from TB 55-8100-200-24 (latest revision).
- 3.12.5. The Contractor shall use repair procedures from chapter 3 "Instructions for Repair and Overhaul" from TB 55-8100-200-24 (latest revision) to maintain the shipping/storage containers in a "Condition Code A" serviceable status. Shipping/Storage containers shall initially (first time seen) be overhauled per section 3, chapter 3 of TB 55-8100-

200-24 (latest revision) then thereafter shall be inspected, repaired, and painted as necessary.

3.13. Environmental Requirements

- 3.13.1. All engine parts must be thoroughly cleaned IAW applicable OEM repair/overhaul manuals. In lieu of specific Honeywell cleaning procedures, the repair facility must utilize FAA Advisory Circular 43-205, Guidance for Selecting Chemical Agents and Processes for Depainting and General Cleaning of Aircraft and Aviation Products, to ensure they are as free as practicable of all hazardous dust to include hexavalent chromium, cadmium, lead, etc., prior to being returned to DoS. Information on these hazards can be found in Occupational Safety and Health Standards 1910.1025 (lead), 1910.1026 (Hexavalent Chromium) and 1910.1027 (Cadmium).

3.14. Replacement Parts (T53 engine only)

- 3.14.1. Component parts found to be in serviceable condition IAW OEM specifications and functional testing can be reused.
- 3.14.2. All life limited parts that are reused shall have sufficient time and/or cycles remaining to reach the next scheduled major maintenance action (i.e., 1250 hour hot section inspection (hot end components) or 2500 hour midpoint inspection (compressor section components)).
- 3.14.3. For replacement parts, the Contractor shall use only new Honeywell certified parts or Honeywell approved used parts overhauled to the OEM overhaul manual specifications by a qualified and regulated source. FAA certified Parts Manufacturer Approval (PMA) replacement parts are not acceptable for use on INL/A T53 engines. The INL/A Airworthiness Authority shall have final authority for all matters related to installation of replacement parts.
- 3.14.4. All Fuel Control Units (FCU) and Governors shall be overhauled in accordance with OEM data and by an OEM approved Service Center.

3.15. Work In Progress Discrepancies or Safety of Flight (SOF) identified discrepancies

- 3.15.1. If work-in progress discrepancies are identified after the initial TIR (CDRL A003)/quotation process (CDRL A006), the Contractor is authorized to repair and invoice without notifying the CO as long as the cost of the additional work is below ten percent (10%) of the originally agreed upon cost to repair.
- 3.15.2. In conjunction with section 3.15.1 of this SOW, if unforeseen SOF items are directed from the OEM, FAA, or the CO, the Contractor is authorized to repair and invoice without notifying the CO as long as the cost of the additional work is below (cumulative cost of both 3.15.1 and 3.15.2 of this SOW) ten percent (10%) of the originally agreed upon cost of repair.
- 3.15.3. Under no circumstances is the Contractor authorized to exceed the previously agreed upon cost to repair (CDRL A006) if projected unforeseen work-in progress and SOF expenditures either reach or exceed ten percent without CO authorization. If unforeseen (both work-in progress and SOF) costs are projected to either reach or exceed ten percent (10%), the Contractor shall stop work immediately on the affected T53 engine and submit a request in writing (CDRL A008) to the CO justifying the additional expenses and requesting authorization to exceed the originally quoted cost of repair.

3.16. Test Cell/Engine Runs

- 3.16.1. Test cell engine runs shall be performed for all post maintenance, repair, overhaul, or modification events. Additionally, the Contractor shall confirm all test cell engine run and performance documentation is included with the final documentation package returned to INL/A (IAW with this SOW, section 3.5.2). Furthermore, the Contractor shall perform and document performance of all post engine run Foreign Object Damage (FOD) inspections, leak checks, filter changes, cleaning, oil analysis (IAW the Army Oil Analysis Program (AOAP), Technical Bulletin 43-0211 (latest revision 4/30/10)) requirements, and preservation IAW OEM specifications prior to shipment.

3.17. Return Shipping

- 3.17.1. The Contractor shall perform and inspect the original shipping container, IAW section 3.12 of this SOW, for serviceability prior to reinstalling the repaired, overhauled, or modified T53 engine prior to shipment. The Contractor shall not ship any DoS assets in unserviceable shipping containers. Engines shall be preserved, packaged, and secured IAW OEM instructions prior to shipment. Shipping containers shall be closed IAW instructions located on the shipping container. Prior to shipment, the USG reserves the right to inspect the engine, shipping container, and all technical documentation and paperwork.
- 3.17.2. The Contractor shall return ship T53 engines and associated GFE to the INL Logistics Center at Melbourne, Florida, utilizing procedures from section 3.7 and section 4.0 of this SOW.

3.18. Technical Field Service Support

- 3.18.1. On an as needed basis, DoS may require technical assistance personnel to travel to/from locations away from the Contractor's facility. Examples include but are not limited to minor repairs, warranty repairs, performance evaluations, accident investigations, training, etc. When requested by the CO, the Contractor shall send personnel to the required location to support DoS requirements. DoS expects no more than 200 man-hours/year will be required for technical assistance away from the Contractor's facility.

3.19. Status Reporting

- 3.19.1. The Contractor shall submit a formal status report for each engine in the repair cycle. The report shall be submitted to the CO, or designated representative, on the first and third Monday of each month. (CDRL A009)

4. DELIVERY

- 4.1. Repaired T53 engine power units, modules, components and INL/A shipping containers shall be delivered to the following address at the Patrick AFB FBO:

Department of State Logistics
2765 Business Center Blvd
Melbourne, FL 32940

- 4.2. Engines shall be delivered to the address in section 4.1 of this SOW no later than 187 calendar days after initial receipt at the Contractor's repair facility unless a different date has been negotiated with the CO. Early delivery is authorized.

5. GOVERNMENT FURNISHED PROPERTY

- 5.1. T53-L-703 Aircraft Turbo-Shaft Engine, National Stock Number (NSN) 2840-00-621-1860.
- 5.2. T53-L-703 Shipping Container, either NSN 8145-00-152-0048 (rectangular) or NSN 8145-00-772-7870/7866 and 8115-00-614-4805 (tubular).

6. PLACE OF PERFORMANCE

- 6.1. T53 engine maintenance, repair, overhaul, or modification shall be accomplished only at the Contractors certified facility described in section 3.1 of this SOW.
- 6.2. The Contractor is authorized to conduct shipping container reconditioning at a location at or away from the Contractor's facility as desired.

7. PERIOD OF PERFORMANCE

- 7.1. The Contractor shall provide the services required in this SOW for a period of 5 years from contract award.

8. APPLICABLE DOCUMENTS

- 8.1. All Honeywell shop, inspection, repair, or other OEM Component Maintenance Manuals (CMMs) and revisions as applicable to the T53-L-703 engine power units, modules and components.
- 8.2. All Honeywell or other OEM service bulletins, amendments, modifications, and specifications as applicable to the T53-L-703 engine power units, modules and components.
- 8.3. All Honeywell, or other OEM applicable documentation or specifications revealed, published, or updated during the course of the contract period, shall be considered as being within the scope of this SOW and may be added to the contract as agreed upon by both parties. If the Contractor receives information more current than that previously provided to DoS, the Contractor must identify the Honeywell or other OEM Manuals, CMMs, revisions, and specifications, including service bulletins, amendments, and modifications, and provide a brief synopsis of the revisions and dates to the CO for review and approval.
- 8.4. For the T53 shipping container, Department of the Army (DA) Technical Bulletin (TB) 55-8100-200-24 (latest revision)

9. MARKING, PACKAGING, AND PRESERVATION

- 9.1. All INL/A engine power units shall be shipped in an INL/A owned reusable engine shipping container (Part Number (P/N) 8145CON002 (rectangular) or PN 8115CON024- 1/3 (tubular). The Contractor shall notify the CO in writing within 7 calendar days of receipt of the engine at its facility in the event an engine is not received in the appropriate INL/A owned shipping container, if the container is damaged, or if it is not in reusable condition IAW section 3.8 of this SOW.

9.2. The Contractor is not responsible for engine shipping container labeling for items shipped from the INL Logistic Center to the Contractor's facility. For engine shipping containers in- route to the INL Logistic Center from the Contractor's facility, the Contractor shall be responsible for stenciling the shipping/storage container with the following information, in addition to the requirements in section 3.12.3 of this SOW, with silver colored paint (FED STD 595B Description Color 37200 for reference only):

- Location: Either end top half of container in 1 inch block letters stencil the following:

**Department of State, INL/A
Logistics 2765 Business Center
Blvd Melbourne, FL 32940
Tel. 321-783-9865**

- Location: Opposite end from item #1, top half of container in 1 inch block letters stencil the following:

- 1. Nomenclature: Engine, Aircraft, Turbo-Shaft,
T53-L-703**
- 2. NSN: 2840-00-621-1860**
- 3. Engine Serial Number**
- 4. Manufacturer: Honeywell**
- 5. Contract or Task Order #: TBD**

- Location: Longitudinally across both sides of the upper case in 2 inch block letters stencil the following:

**Property of the Department of State
Office of Aviation**

10. INSPECTION AND ACCEPTANCE

10.1.1. Inspection and acceptance of material under this contract, to ensure that equipment is in accordance with manufacturer's specifications, shall be performed at destination by a designated INL/A Quality Assurance (QA) person.

10.1.2. A FAA Form 8130-3 or other FAA compliant airworthiness form shall be required for all items provided on this contract. The certificate must be signed by an authorized official of the approved source and must specify the nomenclature, manufacturer's part number and date of manufacture.

(End of SOW)

List of CDRLs:

A001	Loss of Repair Facility Certification
A002	Warranty Plan
A003	Teardown Inspection Report (TIR)
A004	Confirmation of receipt after shipping
A005	Notification of Missing Inventory
A006	Quotation for Repair/Overhaul Services
A007	Property Disposal Plan
A008	Justification for additional over-and above costs
A009	Status Reporting (Info for CDRL) <ul style="list-style-type: none">• Type Engine: Self Explanatory (SE)• Engine Serial Number: SE• Status – State at what major step in the repair cycle the item is currently at. For instance, In Transit (repair station or Patrick FBO), Inventory, TIR, Repairs in-work, Test Cell, etc.• Date Received: SE• Missing Inventory: Y/N (If Yes, identify items)• Approved Quote: Y/N• Type of Repair: State the repair expected to receive• Estimated Completion/Delivery Date: SE• On Schedule: Y/N (If No, explain)• On Budget: Y/N (If No, explain)